

ZERO BEAT

HAMPDEN COUNTY RADIO ASSOCIATION, INC.

Springfield, Mass.

ARRL Affiliated, 31st Year

February, 1980

HAMPDEN COUNTY RADIO ASSN.

Club Meeting

Feeding Hills
Congregational Church
Corner Routes 57 and 137
Feeding Hills, Mass.

February 1, 1980

Harry Joubert, W1WFR, and Ted Scott
will give a demonstration on RTTY and
computers.

March 2, 1980

George Woodward, W1RR, from the ARRL
will discuss narrow band voice mod-
ulation (NBVM).

Also coming is the annual flea mar-
ket and the June banquet. Watch this
column for more info.

OFFICERS AND DIRECTORS

Have you ever wanted to find a club
officer or director to give that
person your opinion or to ask a
question? You knew their names
and calls but you couldn't re-
member what he looked like! Your
problems are over...

Starting with the February meeting
all officers will wear a red ribbon
on their badge and directors will
wear a blue ribbon as a means of
identification.

Now I know who you are, you rascal!

League Membership



Your Treasurer, Paul,
W1ZKT, has membership
applications for the ARRL.
Since we are a league affi-

liated club you can join the league
thru HCRA and the club in turn will
receive a portion of your league
dues.

ICELAND ON 6 METERS

As I write this article, the
high level of sunspot activity has
triggered some spectacular open-
ings on the six meter band. For a
four week period, running from
Thanksgiving until mid-December,
six meters was open into Europe on
almost a daily basis. Furthermore
many openings to the west coast,
the mid-west and Alaska have oc-
cured, along with a brief, one day
opening into Hawaii and Japan.

You may wonder why I am
writing an article two months after
the activity has subsided. Its
purpose is not to give a daily re-
port of propagation on six meters-
conditions were well known to
those active on 50 MHz. Its purpose
is to show that being in the right
place at the right time - luck
more than anything else - can pro-
duce a series of events which may
never again repeat themselves, at
least for this operator!

Some background information
is necessary to set the stage for
the event. In the U.S., Canada,
Central and South America, and
practically all other countries in
this region, the six meter band is
exclusively amateur. This is not
the case in Europe. There, six
meters is reserved for television
channel 1 (have you ever wondered
why U.S. television sets start
with channel 2?). Amateurs are
completely banned from transmitt-
ing on six meters in 98% of all
European countries. The remaining
2% of the countries will grant
special, highly restricted, six
meter privileges only after app-
lication is made for a special
permit.

Continued on page 3...

President

Larry Soltz WBL CJH 567-3444

Vice-President

Ron Beauchemin WBL ETS 593-9852

Secretary

Andre Bouchard WBL BZW 786-2301

Treasurer/Zero Beat Editor

Paul Kress WAL ZKT 568-8291

Directors

Moe Beauchemin	WBL FIP
Jeffrey Duquette	K1BE
Al Sittard	WBL EMN
Ollie Passburg	N1AFK
Jack Lo Monaco	WAL YYK
Steve Shore	WAL ZEV
Ray Morin	KAL CRG
Jack Dumont	K1ZQB

Circulation

Duke Dugas KAL DTH 732-2534

EDITORIAL

We are fortunate in the Greater Springfield area to have three fine amateur radio clubs; the Hampden County Radio Association; the Provin Mountain Amateur Repeater Association; and the Mount Tom Amateur Repeater Association. We do not, however, have inter-club communications to any extent, and your editor proposes that the officers of the three clubs meet to establish better communications among these three groups and join together in the common purpose of furthering amateur radio and service to the community.

Lest there be some misunderstanding, your editor is not proposing a merger of clubs but only common effort for a common purpose. Competition is healthy and rivalries encourage each and everyone to do their best.

Please write your suggestions to your editor of ZERO BEAT, INTERMED, or PROVIN MOUNTAIN ECHOES.

OPPORTUNITIES AVAILABLE

Zero Beat is looking for a staff.

We need reporters who will provide a general interest article each month about people in the club or about things affecting ham radio; we need technical writers either to provide technical information to our club members or to answer technical questions; we need a circulation manager who can assemble and mail Zero Beat each month; we need typists who can pick up copy, type the material and return it to the editor in a timely fashion. We also need help with printing approximately 250 copies of the paper each month. An artist and photographer would also be welcomed with open arms.

If you are willing and able to help maintain the high standard of excellence established for this award winning paper by our previous editor, Jeff Duquett, K1BE, please call me at home any evening in Westfield, 568-8291.

Paul Kress, WAL ZKT
Editor

CG ARTISTS

Your editor is in need of an artist or someone with artistic ability to provide renditions of proposed club logos. Both line drawings and colored renditions are desirable. Join the list of volunteers or volunteer your XYL, OK, kids or sweethearts. We are non-discriminatory.

LEAGUE OPENINGS

The American Radio Relay League has openings for technical and non-technical jobs. This may be your opportunity to get into ham radio for a vocation. If you are interested please contact:

LAIRD CAMPBELL, W1CUT
at league headquarters in
Newington, Connecticut

How, then, is it possible to work 15 or 20 countries in Europe, as many people have done? Nothing bars a person from receiving on six meters. Many European hams have home-brewed simple receive converters.

To work a DX station on six meters, tune your 10 meter receiver to the region of 28.880 to 28.900 MHz. If 6 meters is open, you will hear stations calling "CQ crossband", in this 10 Kc range. They will tell you where on 6 meters that they are listening. Operation of this type is known as crossband. If you have a separate 6 meter transmitter and 10 meter receiver, full duplex operation is possible. Again, when operating crossband of this type, you transmit on 6 meters, but receive the DX station on 10 meters.

When I was operating 6 meters on December 16, only 2 European stations had permission to transmit on 6 meters. They were EI2W in Dublin and ZB2VHF in Gibraltar. As I scanned across the CW portion of 6 meters, I heard a weak CQ at 50.094 MHz. Despite the QSB, I managed to copy TF3SG. I replied to him. He came right back, and we exchanged all the necessary information for a valid contact.

Now the mystery started. How could I have worked Iceland when no other people in the area had even heard of an attempt by an operator to apply for special permission? Several people talked with all indicated that the person must have been an illegal or bootleg station. Iceland on 6 meters was just not possible.

I said nothing more about my contact until December 21. Tom, W1EJ, in Connecticut had heard that a person worked TF3SG on December 20, but to his knowledge, that was the only contact. Then, on Dec. 24 everything fell into place. Dave, W1UQC, and Bernice, K1BRD checked into a 6 meter activity net on 28.885. So did Sveinn, TF3SG, the

mystery station! He told the net that I was his first contact on 6 meters. Bob, VE1ABX was his second contact, on Dec. 20, four days after I had worked him. No other stations got to work TF3SG, because propagation on 6 meters was gone. In addition, his hard earned permit was due to expire on Dec. 31.

Was I to be the only U.S. station to work Iceland on six meters? For 3 weeks and 2 days it would be so. Then, on the morning of Jan. 8, Sveinn reappeared, with his permit extended till March. He had an incredible pileup, but managed to work 44 stations in about two and one half hours.

The final chapter, and the primary reason for which I have waited to write this article, is that on Jan. 19, I talked to Sveinn on 10 meters. He confirmed all my reported information. He asked me how I was ever able to hear him, for his metering showed no measurable power output to his antenna. He double checked and confirmed that his metering was correct. He had forgotten to solder a capacitor in the output circuit of his 25 watt transmitter. Furthermore, he had improperly connected the feedline to his antenna. I do not boast of having a sophisticated setup for 6 meters - my transceiver is of 1968 vintage, all tubes, and the antenna is a small 3 element Cushcraft beam. This will be one QSO which I will never forget and a QSL card which I will long cherish!

John Balboni, AC1T

CLUB LOGO

We have received several proposals for a club logo and now is the time for your suggestions. The Board would like to introduce a logo at the June Banquet.

ENHANCED CW RECEPTION
WITH THE KENWOOD TS520 s

Even though the Kenwood TS520s equipped with the optional Kenwood CW filter functions admirably, there are some instances when something more is required to achieve satisfactory CW reception. The following is a "built in" feature which requires no modifications at all to the rig.

Copying CW during intense QRM can be done by changing the mode switch to the "tune" position and using the RIT function simultaneously. The beat note of the received signal will shift from the nominal 800 HZ to approximately 100 HZ when changing from CW to TUNE mode. This will move the desired signal to a different point in the receiver's passband and move the QRM out of the passband. Most people are not used to copying such a low frequency beat note and may take a little time to get used to. I suggest practice copying some QSO's just to get used to the low pitch. Using hi-fi quality headphones will also help because they have better low frequency response than communication type headphones. The only thing you have to do is go back to the "CW" mode before you transmit.

Gent Lam, W1CQF

FIELD DAY

Now is the time to start thinking about field day which is held on the last weekend in June. Let Larry, WB1CJH, know what part you want so that he may begin to make plans. This is a great chance for newcomers to amateur radio to get some "hands on" operating experience. If we have as many points in 1980 as we have had fun in the past years we are sure winners.

WELCOME

We welcome eleven new members to the Hampden County Radio Association:

Milton Teitel	K1HNN
Richard Dugas	-
Bill Williams	WB1GMN
Norbert Hluchnik	WB1 GIL
Jim Chain	K1CEC
Art Fisher	K1AJZ
Howard Cutting	W1JWV
Ray Chafee	W1ORT
Butch Le Brasseur	K1BLV
Gary Norman	AB1I
Dave Pentilla	K1COW

You are warmly welcomed to the HCRA and we look forward to a long and cordial association. Your club stands ready to help you achieve your goals in amateur radio and your officers and directors stand ready to offer their assistance to you.

Membership in the club now stands at 214 members.

DX Pedition

Don Gleason, W1RED/8FEZ will be in the Barbados and will be active from February 13, 1980, to March 2, 1980. Most mornings SSB at 14.285 MHz at approximately 11:30Z. Most other QSO's 90% CW at no set time during the day. Frequency used will be 14.038/21.038/28.038 MHz. Look for him ARRL DXCW contest Feb. 16 and 17, 1980. QSL to Don Gleason, W1RED, 189 Prospect Avenue, Northampton, Mass. 01060. S.A.S.E. will be appreciated.

FOR SALE

Brand new (used 1/2 hr) Dentron equipment

HF200A Transceiver, HF ACS P/S with speaker.

Clipperton-L 2KW Amplifier with built in power supply.

MT - 3000 A Tuner.

Contact Dr. M. H. Teitel, K1HNN, Springfield, Mass, 734 4558

ARRL NUMBERED RADIOGRAMS

The letters ARL are inserted in the preamble in the check and in the text before spelled out numbers, which represent texts from this list. Note that some ARL texts include insertion of numerals. *Example:* NR 1 RW1AW ARL 5 NEWINGTON CONN JUNE 1 DONALD R SMITH AA 164 EAST SIXTH AVE AA NORTH RIVER CITY MO AA PHONE 733 3968 BT ARL FIFTY ARL SIXTY ONE BT DIANA AR. For additional information about traffic handling, consult *Operating an Amateur Radio Station*, published by ARRL.

Group One -- For Possible "Relief Emergency" Use

ONE	Everyone safe here. Please don't worry.
TWO	Coming home as soon as possible.
THREE	Am in _____ hospital. Receiving excellent care and recovering fine.
FOUR	Only slight property damage here. Do not be concerned about disaster reports.
FIVE	Am moving to new location. Send no further mail or communication. Will inform you of new address when relocated.
SIX	Will contact you as soon as possible.
SEVEN	Please reply by Amateur Radio through the amateur delivering this message. This is a free public service.
EIGHT	Need additional _____ mobile or portable equipment for immediate emergency use.
NINE	Additional _____ radio operators needed to assist with emergency at this location.
TEN	Please contact _____. Advise to standby and provide further emergency information, instructions or assistance.
ELEVEN	Establish Amateur Radio emergency communications with _____ on _____ MHz.
TWELVE	Anxious to hear from you. No word in some time. Please contact me as soon as possible.
THIRTEEN	Medical emergency situation exists here.
FOURTEEN	Situation here becoming critical. Losses and damage from _____ increasing.
FIFTEEN	Please advise your condition and what help is needed.
SIXTEEN	Property damage very severe in this area.
SEVENTEEN	REACT communications services also available. Establish REACT communications with _____ on channel _____.
EIGHTEEN	Please contact me as soon as possible at _____.
NINETEEN	Request health and welfare report on _____. (State name, address and telephone number.)
TWENTY	Temporarily stranded. Will need some assistance. Please contact me at _____.
TWENTY ONE	Search and Rescue assistance is needed by local authorities here. Advise availability.
TWENTY TWO	Need accurate information on the extent and type of conditions now existing at your location. Please furnish this information and reply without delay.
TWENTY THREE	Report at once the accessibility and best way to reach your location.

TWENTY FOUR Evacuation of residents from this area urgently needed. Advise plans for help.

TWENTY FIVE Furnish as soon as possible the weather conditions at your location.

TWENTY SIX Help and care for evacuation of sick and injured from this location needed at once.

Emergency/priority messages originating from official sources, must carry the signature of the originating official.

Group Two -- Routine messages

FIFTY	Greetings by Amateur Radio.
FIFTY ONE	Greetings by Amateur Radio. This message is sent as a free public service by ham radio operators here at _____. Am having a wonderful time. Will let you know when I return.
FIFTY TWO	Really enjoyed being with you. Looking forward to getting together again.
FIFTY THREE	Received your _____. It's appreciated; many thanks.
FIFTY FOUR	Many thanks for your good wishes.
FIFTY FIVE	Good news is always welcome. Very delighted to hear about yours.
FIFTY SIX	Congratulations on your _____, a most worthy and deserved achievement.
FIFTY SEVEN	Wish we could be together.
FIFTY EIGHT	Have a wonderful time. Let us know when you return.
FIFTY NINE	Congratulations on the new arrival. Hope mother and child are well.
*SIXTY	Wishing you the best of everything on _____.
SIXTY ONE	Wishing you a very merry Christmas and a happy New Year.
*SIXTY TWO	Greetings and best wishes to you for a pleasant _____ holiday season.
SIXTY THREE	Victory or defeat, our best wishes are with you. Hope you win.
SIXTY FOUR	Arrived safely at _____.
SIXTY FIVE	Arriving _____ on _____. Please arrange to meet me there.
SIXTY SIX	DX QSLs are on hand for you at the _____ QSL Bureau. Send _____ self addressed envelopes.
SIXTY SEVEN	Your message number _____ undeliverable because of _____. Please advise.
SIXTY EIGHT	Sorry to hear you are ill. Best wishes for a speedy recovery.

*Can be used for all holidays.

ARRL NUMBERS SHOULD BE SPELLED OUT AT ALL TIMES.

This list becomes effective January 1, 1980.

ARRL RECOMMENDED PRECEDENCES

Please observe the following ARRL provisions for PRECEDENCES in connection with written message traffic. These provisions are designed to increase the efficiency of our service both in normal times and in emergency.

Precedences

- EMERGENCY** Any message having life and death urgency to any person or group of persons, which is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials or instructions vital to relief of stricken populace in emergency areas. During normal times, it will be very rare. On CW/RTTY, this designation will always be spelled out. When in doubt, do not use it.
- PRIORITY** Use abbreviation *P* on CW/RTTY. This classification is for a) important messages having a specific time limit b) official messages not covered in the emergency category c) press dispatches and emergency-related traffic not of the utmost urgency d) notice of death or injury in a disaster area, personal or official.
- WELFARE** This classification, abbreviated as *W* on CW/RTTY, refers to either an inquiry as to the health and welfare of an individual in the disaster area or the reply to such an inquiry that indicates all is well. Welfare traffic is handled only after all emergency and priority traffic is cleared. The Red Cross equivalent to an incoming Welfare message is DWI (Disaster Welfare Inquiry).
- ROUTINE** Most traffic in normal times will bear this designation. In disaster situations, traffic labeled Routine (*R* on CW/RTTY) should be handled last, or not at all when circuits are busy with higher precedence traffic. Most traffic handled on amateur circuits in normal times will fall into this category.

Note -- the precedence always follows the message number. For example, a message number may be 207 *R* on CW and "Two Zero Seven Routine" on phone.

QUESTIONS FOR THE QSL BUREAU

by K1BE

Every month we will try to answer common and uncommon questions asked in the bureau. We hope to make this up into an information sheet to send out with the envelopes and cards. Send in any questions you might have.

Q. Why did you fold some of my cards in half?

A. Your envelopes are too small! The "DL" cards especially won't fit. File 5x7 envelopes, and it's a good idea to paperclip extra postage to the outside if you expect extra cards. Those big 9x11 envelopes cost an extra .07¢ to mail and don't fit in our files easily. Try not to use them.

Q. Why did you send me three of my envelopes with six cards in each one all at once? Why didn't you put them all into one envelope?

A. The post office won't accept postage due mailings like they used to. Some just get tossed out by them. You only had 15¢ on each envelope, which means we can only mail about 6 QSLs per envelope. Paperclip some extra stamps next time to the outside.

Q. I've got a "K1" call and have permanently moved to New Jersey. Shouldn't I use the "W2" bureau now?

A. Tough break about living in New Jersey. No, you keep using the one bureau until you get a "two" call. Experienced DX stations will send your QSLs to the New England bureau even though you sign, "portable two".

Q. Who's the person who sorts my cards?

A. The identity of the individual sorters is kept a secret due to problems in the past.

Q. Why doesn't the bureau bring the cards to the New England ARRL convention?

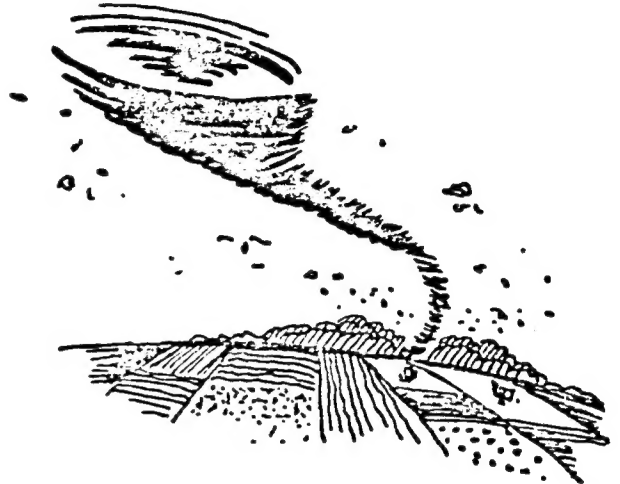
A. It's physically impossible. We do sell envelopes and answer questions though.

Q. Does the bureau send out speakers to club meetings to explain and answer questions?

A. Yes and No. Write and be ready to pay gas, tolls, and supper and we will see if we can help.

Q. What's the phone number of the bureau?

A. We don't have one. Always write and enclose an SASE or postcard if you want a quicker answer. A two month wait is common.



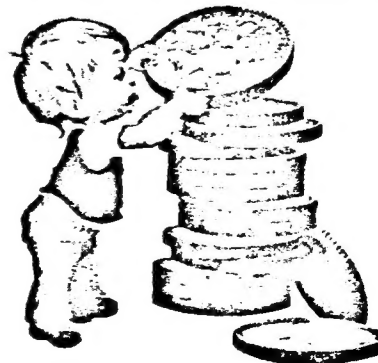
JOIN THE AMATEUR RADIO EMERGENCY SERVICE!

WANTED

4 x 250 and 4C x 300A's,

New or Used.

K1ZJH, 1 203 749 7186
20 Farsun Road
Somers, Ct. 06071



DON'T
FORGET
YOUR DUES
S.A.S.E.
FREEZE

Zero Beat, February, 1980

FOR SALE

HAM GEAR FOR SALE BY W1MDM:

HA-6 transverter by Hallicrafters.
Puts a 10 meter station on 6 meters

SX-101 receiver also Hallicrafters.
Ham bands plus WWV

4-1000 linear amplifier by Cal
Phillips. A cool 2 KW PEP with
spare tubes.

24 hour digital clock - Tymeter.

10 minute repeating timer -
Lakeshore electric.

Microphone - Astatic 10D, with
shaped frequency response for SSB.

Vibroplex bug - the plated one,
#205971

Aircraft receiver - R-445 ARN-30,
with power supply.

Tower - Rohn PT-64. Puts the 2
meter beam at 75 feet.

HAM-M rotor, complete with 100 ft
of rotor cable.

Remote 3 position antenna relay,
with multi conductor cable.

Aluma-foam hard line coax, 100 ft
with connectors.

Beams: 11 elements on 2 meters,
4½ elements on 6 meters, Mosley
TA-33 tri-bander.

Signal generator, Eico Mod. 322.

Lo-pass filter, Johnson KW.

Waters CO-AX switches, one for
amp in and out, and one 6 position.

Antenna coupler for open wire by
W1MDM - with feeders.

Dummy load for 1 KW, made from
Glo-bar resistors.

Misc blowers, fans, and meters.

Also - HT-37 & SB-300 presently on
the air in Conn.

FOR SALE

Two Realistic High Fidelity speakers

Model MC 1000

#40-1980A, wood cabinets,
not plastic as in newer speakers.

\$ 35.00 each

W1YYK, Jack, (413) 786 2556

Cushcraft 18 ATV 40 - 10 M
vertical with radials
\$ 40.00

KALAPR, Fred Stepanick
Call after 6 PM, 786 6705

Heath HM-15 SWR Meter	\$ 15.00
" HD-10 Electronic Keyer	35.00
Mosley MF-33 20-15-10	
3 element beam	75.00
CDE TR44 Rotor	45.00
HYGain 14AVQ Trap Vertical	35.00

Call Ray, K1LCRG 525 6202

Wilson 1402SM 2 meter Handy Talkie
with factory TEP, Nicads, Drop in
charger, monolithic filter, duckie,
external mike, leather case,
52-52, 34-94, 40-00, 19-79.

Gent Lam, W1CQF, (413) 737 9426

1 - Collins (R388/UR) 51J-3
General Coverage Receiver
.5 - 30 MC, Notch filter, BFO.

1- Motorola HT220 4 channel
VHF HANDIE-TALKIE W/ mobile
battery charger, 2 watts
(can be used for 2 meters)

2 - Motorola ME70 VHF-HiBand
Business Band Handie Talkies
2 watts W/120 vac chargers
(151.805)

1 - Motorola VHF-Low Band Tone
Alert receiver on 33.94 MC

For more information contact:
Steve, W1ZEV, (203) 243 3030

HAMPDEN COUNTY RADIO ASSOCIATION, INC.
 Membership List, February, 1980

WBLABF	Heather	Brimfield	WBLDBY	Larry	Longmeadow
NLABJ	Bob	Chicopee	WBLDGJ	Mike	Ludlow
WLACJ	Ed	West Springfield	WBLDLT	Doug	Westfield
WALADV	Carl	Ludlow	WBLDLG	Louis	Southwick
WBLAEW	Jim	Southwick	WBLDLE	John	East Longmeadow
NLAEH	Greg	West Suffield	WBLDLH	George	Westfield
NLAFK	Olaf	East Longmeadow	WALDNE	Bob	South Hadley
KALAGQ	Steve	Longmeadow	KALDNX	Les	Springfield
NLAGW	Paul	Chicopee	KALDPY	Bert	Enfield
KALAJZ	Art	West Suffield	WBLDTZ	Bert	Wilbraham
KALAKM	Marcia	Springfield	KALDTH	Duke	West Springfield
WLALL	George	Southwick	WLDVW	Nelson	North Amherst
KALANE	Hubert	East Longmeadow	KALECJ	Murel	Ludlow
WBLAPD	Jack	Springfield	WALECR	Gary	Southwick
KALAPR	Fred	Feeding Hills	WBLEDN	Al	Ludlow
WLARA	Jim	West Springfield	KLEFH	Al	Enfield
NLASC	Ed	Ashfield	WBLEHS	Barb	Springfield
WBLAUV	Tom	Lenox	WBLEMN	Al	Chicopee
KALAVM	Hank	Springfield	WBLENG	Bob	Longmeadow
KALAVL	Ray	Westfield	KLEPI	Flood	Feeding Hills
KALAZD	Dick	West Suffield	WBLEQS	Bob	Chicopee
KLBE	Jeff	Southwick	WBLETS	Ron	Chicopee
KALBAP	Dave	Chicopee	WALEYF	Steve	Wilbraham
KALBLV	Butch	Ludlow			
KALBNN	Bill	Westfield	WLFAB	Ken	Chicopee
WBLBPJ	Dave	Wilbraham	WBLFIP	Moe	Chicopee
WBLBPL	Bob	Springfield	WBLFIJ	Art	Chicopee
KLBUB	Bob	Westfield	WLFJ	Fran	Northampton
WLBVR	Percy	Lansboro	KLFUA	Fred	Westfield
WBLBWD	Don	Springfield			
WLBXB	Harvey	Southwick	WBLGAJ	Sebastian	Enfield
WBLBZW	Andy	Feeding Hills	WBLGIL	Norbert	Windsor
			WBLGLX	Raymond	Wilbraham
WBLCAC	Scott	Boston	WBLGLZ	Al	Longmeadow
KALCAX	Francis	Springfield	WBLGMN	Bill	Suffield
WBLCAB	Dave	Chicopee	WLGQP	Al	Southampton
KALCCL	Dave	Granby (Ma)	WBLGTR	Jack	Springfield
KALCDS	Peter	Wilbraham	KLGTE	John	Feeding Hills
KALCEC	Jim	Suffield	WLGUG	Dick	Springfield
WBLCJH	Larry	Longmeadow	KLGXU	Larry	Ludlow
WLCJK	Bill	Holyoke			
WLCKP	Harold	Amherst	WLHDQ	Ed	Canton (Ct)
WBLCLN	Malcolm, Jr.	South Hadley	WBLHEE	Philip	Springfield
WBLCLO	Malcolm, Sr.	South Hadley	WLHHR	John	Columbia (Ct)
NLCM	Len	Wilbraham	KLHNH	Milton	Springfield
KLCOW	Dave	Spencer	KLHTS	Fred	Westfield
KALCPG	Leo	Holyoke	ABLI	Gary	Granby (Ct)
WALCQF	Gent	Springfield	KLIJU	Norm	Monson
NLCQ	Bill	Granby (Ma)	KLIJV	Jean	Monson
KALCRG	Ray	East Longmeadow	KLITU	Don	Amherst
KLCSE	Roy	Easthampton	WLIUB	Al	North Granby (Ct)
KALCIM	Richard	East Longmeadow	WLIVK	Chet	Springfield
WBLCXG	Rudy	Indian Orchard	WLJP	Bill	Brimfield
WALCYK	Ed	Westfield	KLJDL	Dick	Longmeadow
			WLJWV	Howard	Springfield
			WLKK	Art	Agawam
			WALKJD	Al	Easthampton

WIKUE	Tom	Springfield
WIKUL	Bob	Monson
WIKZU	Herb	Feeding Hills
WAILIS	Al	Enfield
WILJQ	Ray	Northampton
WILRA	Alden	Westfield
WIMM	Bob	Holyoke
KIMAL	Mac	Northampton
WIMDM	Cal	Plainville (Ct)
WIMOK	Myles	Chicopee
WIMQK	Mal	Springfield
KINJC	John	West Springfield
WINLE	Bob	Springfield
WINPL	Ed	Chicopee
WINQC	Wes	Springfield
WINRK	Bob	Westfield
WINYP	Bob	Holyoke
WALORT	Ray	Monson
NLPF	Norm	Springfield
NLPN	Hugh	Amherst
WALPGT	Gerry	Longmeadow
WALPSC	Howard	Springfield
WALPUX	Bruce	Unionville (Ct)

KIQMV	Bill	Ludlow
WLUJ	Dick	Ashuelot (NH)
WALQXX	John	Williamsburg

WIRBU	Jim	Easthampton
WIRDC	Walter	Holyoke
WIREB	Don	Northampton
WIRLV	Ted	Ludlow
WIRRW	Glen	Amherst
WALRWU	Frank	Southwick
WALSDY	Don	Springfield
KISUD	Bob	Springfield
WALSOB	Peter	Agawam
WALSMH	Al	West Hatfield
ACIT	John	Agawam
WALTHR	Don	Southwick
WITM	Bill	Great Barrington
WITTL	Ed	Indian Orchard
WITXS	Dick	Springfield

WALUCQ	Bill	Indian Orchard
WALUGL	Dick	West Springfield
WALUIV	Ed	Springfield
KLUJT	Carl	Warren
WLUKR	Eunie	Monson
WLUPH	Don	Hampden
WLUWX	Cliff	Holyoke
WALVAH	Bob	Westfield
WALVCU	Chick	Indian Orchard
WALVHU	Bill	Palmer
WLVNE	Leo	Ludlow
KLVWX	Paul	Suffield (Ct)
KLWB	Bill	Suffield (Ct)
WALWER	Larry	Springfield
WLWLE	Bob	Springfield
WALWRK	Rick	Northampton

WALWRM	Joe	Northampton
WALWSR	Bill, Jr.	West Springfield
WALWSS	Bill, SR.	West Springfield
KLWTA	Len, Jr.	Enfield
WALWTK	Louis	Ludlow
WALWXS	Don	Springfield
KLWXU	Roger	Westfield
WLXL	Chris	Amherst
KLUOR	Doris	Florence
WALYCA	Try	Southwick
WALYOG	Jim	Southwick
KLYQQ	Chet	Springfield
WALYYK	Jack	Agawam
WALYYW	Rich	East Longmeadow
WIZI	John	Amherst
WALZEV	Steve	Bloomfield
KLZFI	Bob	Enfield
WALZKT	Paul	Westfield
KLZOC	Joe	Springfield
KLZQB	Jack	Chicopee
WALZRI	Roger	Lodi (Ca)
WALZXX	Chris	Newport News (Va)
WALZXY	Chet	Enfield (Ct)

IMPROVED SNR BRIDGE

After listening to W1NG's explanation of why he had two SWR bridges in line to the same antenna (element switching back and forth between forward and reflected positions), I decided to go one step further and integrate the above in my homebrew antenna tuner.

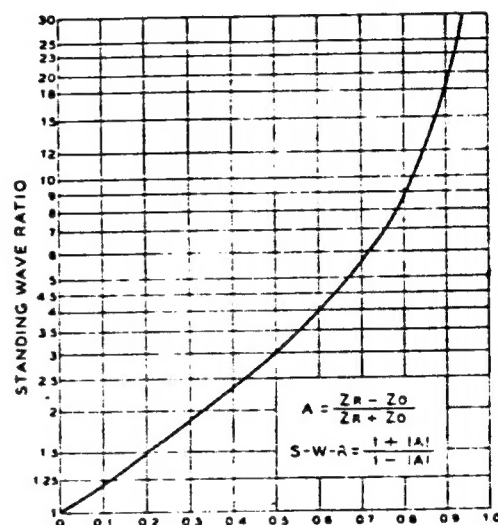
The basic bridge is copied after the Heathkit type (also known as the Monimatch) using pickup wires parallel to the center conductor of a coaxial cable. The 150 ohm terminating resistors are for a 52 ohm version and can be changed to 100 ohms for a 75 ohm version. Details of this part will not be discussed as it is well documented in the various handbooks.

The only other components required are two meters (preferably having the same full scale sensitivity) and a 2 gang pot. The scales on the meters and movement sensitivity are not critical since they are only being compared for full scale deflection on one and minimum deflection on the other. The pot point is adjusted for full scale on the forward meter and the reflected meter is automatically tracked. Adjust the antenna tuner for minimum deflection on the reflected meter. Some interaction will occur between the meters as the antenna tuner is adjusted.

The usual forward-reflected switch is eliminated. The reflected meter can be calibrated for SWR by using the following chart. The ganged pot can be any dual control from 10K to 50K.

This configuration of SWR bridge is available in commercially made versions and no claim is made for originality. Now that I've built it, I don't know how I got along without it.

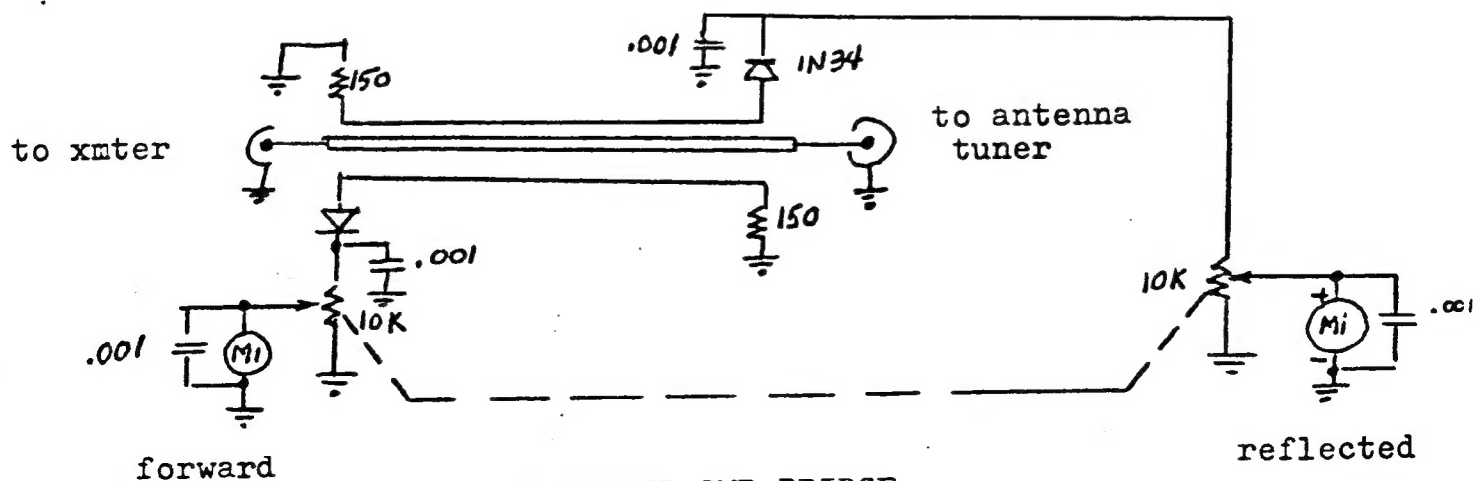
Gent, WAlCQF



· READING ON 0-1 INSTRUMENT, OR FACTOR TIMES FULL SCALE
(MAGNITUDE OF REFLECTION COEFFICIENT, A)

RELATION BETWEEN STANDING-WAVE RATIO AND REFLECTION COEFFICIENT

This chart may be used to convert reflection-coefficient indications such as are obtained with a bridge-type standing-wave indicator or an indicating twin lamp into values of standing-wave ratio.



IMPROVED SWR BRIDGE

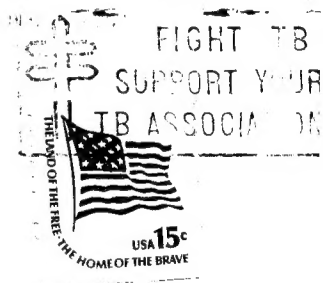
IN THE GOOD OLD DAYS:

W1MNG has help trying a new gamma match on 10 meters. W1UD trying out amateur television with W1CCH's help. Neighbors thrilled when W1QWJ with W1JYH took down the 6 over 10 array. Little did they realize it would soon be back up! W1NLE has a classy two meter mobile installation. W1RRW tired of frosty evenings operating ten meters mobile, is going back to the warmth of his amplifiers. (All from the October 1949 ZB)

The HCRC picnic at Look Park a huge success. Bill Blankenship and Rog Corey opposed each other's teams in softball. Dirt Farmer W1PHU has a crop of tomatoes. W1BVR using a microphone for the first time. (from the September 1950 ZB).



Hamden County Radio Association, Inc.
Paul J. Kress, W1ZKT, Editor
216 Eastwood Drive
Westfield, Mass. 01085



ACIT

FIRST CLASS MAIL

Zero Beat
February, 1930